

REMARKS/ARGUMENTS

Claims 1, 7 and 12 have been amended to clarify the subject matter thereof, as described below; and claim 6 has been cancelled.

Reconsideration of the application is respectfully requested for the following reasons:

Rejection of claims 1-15 as being anticipated by or unpatentable over Woike (GB 2363895)

This rejection is respectfully traversed on the grounds that the Woike patent fails to disclose or suggest a CCD controller that generates a driving signal in accordance with detected light intensity, as claimed, for determining timing in order to detect holographic data, the CCD then detecting holographic data in response to the driving signal. Instead, Woike discloses an apparatus in which controlling elements in the form of piezoelectric elements 16 and a stepping motor 15 change the magnitude of an intensity of a transmitted component of a laser beam, in order to minimize the intensity of the transmitted component, which is contrary to the claimed invention.

The invention as claimed in the amended claim 1 relates to an apparatus for detecting holographic data reproduced from a holographic medium, including a transmission beam detector, a CCD controller and a CCD. The transmission beam detector detects temporal light intensity of a transmission beam which is a second

portion of the reference beam, so that the transmission beam does not need to be diffracted to reproduce the holographic data and instead passes through the holographic medium. Upon detection of the temporal light intensity of the transmission beam, the CCD controller generates a driving signal in accordance with the detected light intensity for determining timing in order to detect the holographic data. Thereafter, a CCD detects the holographic data in response to the driving signal. Because the CCD controller controls timing for driving the CCD, the present invention does not need to use position data representing precise locations where interference patterns have been recorded as well as a servo system. Further, in the present invention, a specific mark representing the presence of an interference pattern within the holographic medium is not required, so that a recording capacity of the holographic medium can be increased.

Similarly, the invention as claimed in the amended claim 12 relates to a method for detecting holographic data reproduced from a holographic medium in which the temporal light intensity of a transmission beam is again initially detected. The transmission beam is a second portion of a reference beam, such that the transmission beam is not diffracted to reproduce the holographic data and instead passes through the holographic medium, after which a driving signal is generated in accordance with the detected light intensity for determining timing for detecting the holographic data. Thereafter, the holographic data is detected in response to the driving signal.

Woike, as noted by the Examiner, also discloses an apparatus for detecting holographic data reproduced from a holographic medium. Woike's apparatus

includes an intensity measuring device 9, a CCD camera 8 and controlling elements (see Fig. 1). However, the controlling elements are different from the CCD controller in the present invention. The controlling elements have three piezoelectric elements 16 and a stepping motor 15 (see Fig. 2), wherein the three piezoelectric elements 16 change the magnitude of an intensity corresponding to the intensity of a transmitted component of laser beam, and the stepping motor 15 rotates a turntable 7 having the piezoelectric elements 16. Accordingly, since the controlling elements function to **minimize** the intensity of the transmitted component of the laser beam, the controlling elements are different from the CCD controller in claim 1 of the present invention. Further, for the same reason, Woike does not disclose the step of generating a driving signal in accordance with a detected light intensity for determining **timing** in order to detect the holographic data recited in claim 12.

Since Woike does not disclose at least the above mentioned features of claims 1 and 12 in the present invention, and since there is no possible motivation to include the features, it is respectfully submitted that Woike could have not suggested the claimed inventions, and that the rejections under 35 USC 102(b) or 35 USC 103(a) are therefore improper.

Claims 2-5 and 13-15 are allowable for the same reasons indicated with respect to the claims 1 and 12, respectively, and further because of the additional features recited therein which, when taken alone and/or in combination with the features recited in the claim 1 or 12 remove the invention defined therein further from the disclosures made in the prior art references.

Further, since the amended claim 7 includes a detecting unit for detecting the holographic data reproduced from a holographic medium, which has a similar feature as stated above with respect to claim 1, claim 7 and its dependent claims 8-11 are also allowable.

CONCLUSION

Applicant believes that this is a full and complete response to the Office Action. For the reasons discussed above, applicant now respectfully submits that the pending claims are in complete condition for allowance. Accordingly, it is respectfully requested that the Examiner's rejections be withdrawn; and that claims 1-5 and 7-15 be allowed in its present form.

Should the Examiner require or consider it advisable that the specification, claims an/or drawings be further amended or corrected in formal respects, in order to place the case in condition for final allowance, then it is respectfully requested that such amendment or correction be carried out by Examiner's Amendment and the case be passed to issue.

Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

BACON & THOMAS, PLLC



By: BENJAMIN E. URCIA

Registration No. 33,805

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BACON & THOMAS, PLLC
625 Slaters Lane, 4th Floor
Alexandria, Virginia 22314

Telephone: (703) 683-0500